

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Rappaport *et al.*

Serial No.: 10/626,770

Filed: July 25, 2003

Confirmation No.: 1850

Group Art Unit: 2611

Examiner: Burd, Kevin Michael

TKHR Ref: 060707-1480

Client Ref: GV237

For: **POWER SPECTRAL DENSITY MASKS FOR ADSL+**

REMARKS IN SUPPORT OF PRE-APPEAL BRIEF CONFERENCE

Mail Stop: AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Applicants submit the following remarks in support of a Request for a Pre-Appeal Brief Conference.

DEPOSIT ACCOUNT AUTHORIZATION

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor are hereby authorized to be charged to our Deposit Account No. 50-0835.

REMARKS

Claims 1-13 are currently pending and subject to a final rejection based on the FINAL Office Action dated April 13, 2009. Of relevance to the present response, the FINAL Office Action rejected claim 1-13 under 35 U.S.C. §102(a) as allegedly being anticipated by the instant application's disclosed prior art. Applicants respectfully traverse the rejection, and respectfully submit that the rejection of claims 1-12 in the instant application is clearly in error.

I. Rejection of Independent Claim 1

For purposes of the present response, Applicants address the rejection of claim 1 to point out errors in the rejection. Although Applicants believe errors in the rejection are evident for various independent claims, for purposes of conciseness in the pre-appeal brief conference, Applicants address the errors in a representative claim for the rejection of claims 1-12, specifically, independent claim 1. In the Response to Arguments section of the FINAL Office Action dated April 13, 2009, the Office Action asserts that *"it is not clear how the claimed apparatus is patentable [sic] distinct from the prior art."* The Office Action further asserts that the structural components in the prior art are the same as those in the claimed invention.

As noted in the response filed by Applicants on January 12, 2009, the claim language directed to the PSD masks in claim 1 and in the various claims should be given patentable weight. Applicants respectfully submit that independent claim 1 patentably defines over the instant application's disclosed prior art for at least the reason that the instant application's disclosed prior art fails to disclose, teach, or suggest the features emphasized below in claim 1.

Claim 1 recites:

1. An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management by controlling use of overlapped modes of operation, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum transmission over a plain old telephone system (POTS) mode of operation, **wherein for CO deployment, the CO operator shapes the spectrum transmission based on the following PSD mask: -97.5 \pm 10% decibel-milliwatts per hertz (dBm/Hz) at 0 \pm 10% kilohertz (kHz); -97.5 \pm 10% dBm/Hz at 4 \pm 10% kHz; -92.5 \pm 10% dBm/Hz at 4 \pm 10% kHz; -36.5 \pm 10% dBm/Hz at 25 \pm 10% kHz; -36.5 \pm 10% dBm/Hz at 1104 \pm 10% kHz; -46.5 \pm 10% dBm/Hz at 2208 \pm 10% kHz; -101.5 \pm 10% dBm/Hz at 39.25 \pm 10% kHz; -101.5 \pm 10% dBm/Hz at 8500 \pm 10% kHz; -103.5 \pm 10% dBm/Hz at 8500 \pm 10% kHz; and -103.5 \pm 10% dBm/Hz at 11040 \pm 10% kHz.**

(Emphasis added). The Examiner maintains that “[s]pecific break points of a power density spectral mask are not components of an apparatus or system.” (FINAL Office Action mailed April 13, 2009, page 4). In this regard, the Examiner does not appear to give patentable weight to the defined PSD mask. Applicants respectfully submit that the breakpoints recited in claim 1 (and claims 2-12) serve as limitations to the CO operator component recited in the claims. The claim language directed to the PSD mask is not a mere expression of an intended use, but a positive recitation that defines the CO operator. Furthermore, the limitation is not immaterial to the structure or function of this component. As set forth in claim 1, the CO operator shapes the spectrum transmission based on a defined PSD. Applicants respectfully submit that the Examiner’s assertion that the systems of the art of record can receive an input to generate any plurality of desired breakpoints appears to be based on speculation.

That is, there is no disclosure in the art of record directed to the specific PSD mask defined in claim 1. Applicants refer to MPEP 2173.05(g), which states:

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. In re Swinehart, 439 F.2d 210, 169 USPQ 226 (CCPA 1971). A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used.

. . .
In a claim that was directed to a kit of component parts capable of being assembled, the Court held that limitations such as “members adapted to be positioned” and “portions . . . being resiliently dilatable whereby said housing may be slidably positioned” serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. In re Venezia, 530 F.2d 956, 189 USPQ 149 (CCPA 1976).

(Emphasis added). Applicants respectfully submit that patentable weight should be given to the claim language directed to the recited PSD masks as this defines the CO operator in the various claims.

II. Rejection of Independent Claims 2-12

For similar reasons presented in association with the discussion of claim 1 above, Applicants respectfully submit that there is clear factual error, and respectfully request that the rejection of claims 2-12 also be withdrawn and prosecution re-opened.

CONCLUSION

Favorable reconsideration and allowance or the re-opening of prosecution on the merits of the present application is hereby courteously requested.

Respectfully submitted,

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